

Date: Wednesday, 1/30/2008 7:52:00 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FRAME WELDMENT
Job Number	: 37054		
Estimate Number	: 11202		
P.O. Number	:	Part Number	: D3330041
This Issue	: 1/30/2008 S.O. No. :	Drawing Number	: D3330 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LARGE FAB ASSY	Drawing Revision	: D
Previous Run	: 37053	Material	:
Written By	:	Due Date	: 2/20/2008 Qty: 2 Um: Each
Checked & Approved By	: <u>2/08 01 30</u>		
Comment	: Est. A 05.01.13 New Issue KJ/JLM est B 07.05.14 revC dwg ec Est C 07.12.19 Rev D ecn1085 EC		

### Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D33301	Panel
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Panel

Pick:

Qty Part Number Description Batch

1	D3330-1	Panel	B35482
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*LS*

2.0	D33302	Panel
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Panel

Pick:

Qty Part Number Description Batch

1	D3330-2	Panel	B35486
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*LS*

3.0	D33303	Panel
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Panel

Pick:

Qty Part Number Description Batch

1	D3330-3	Panel	B35487
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*LS*

4.0	D33305	Rail
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Rail

Pick:

Qty Part Number Description Batch

*LS 08/03/05*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 7:52:00 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FRAME WELDMENT

Job Number: 37054

Part Number: D3330041

Job Number:



Seq. #:

Machine Or Operation:

Description :

1

D3330-5

Panel

B36011

JS

5.0

D33307

Panel



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Panel

Pick:

Qty Part Number Description Batch

1 D3330-7 Panel

B34122

JS

6.0

D33309

Top Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Top Plate

Pick:

Qty Part Number Description Batch

1 D3330-9 Panel

B35488

JS

7.0

D333011

Long Pin Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Long Pin Bracket

Pick:

Qty Part Number Description Batch

1 D3330-11 Long Pin Bracket

B35483

JS

8.0

D333013

Short Pin Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Short Pin Bracket

Pick:

Qty Part Number Description Batch

1 D3330-13 Short Pin Bracket

B37079

JS

9.0

D333015

Handle



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Handle

Pick:

Qty Part Number Description Batch

1 D3330-15 Handle

23046 → 1x B37080 → 1x

JS 08/03/05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 7:52:00 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FRAME WELDMENT

Job Number: 37054

Part Number: D3330041

Job Number:



Seq. #:

Machine Or Operation:

Description:

10.0

D333017

Handle Socket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

Handle Socket

Pick:

Qty Part Number Description Batch

1 D3330-17 Handle Socket B35484

ls

11.0

D333019

Handle Rim



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

Handle Rim

Pick:

Qty Part Number Description Batch

1 D3330-19 Handle Rim B30957

ls

12.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble and Weld as per Dwg D3330 using D3330-041T1

Identify as D3330-041

ls 08/03/05 (2x)

13.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08.03.05 (2)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/03/05 (+2)

15.0

POWDER COATING

POWDER COATING



M180 SR



(2x)

Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

M. 08/03/05

16.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 08/03/05 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: 1 Date: 08/03/06

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/30/2008 7:52:00 AM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FRAME WELDMENT

Job Number: 37054

Part Number: D3330041

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: (STEVE)

SD 08/03/05

18.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

2 08/03/06

Job Completion



mi 2008/3/05

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

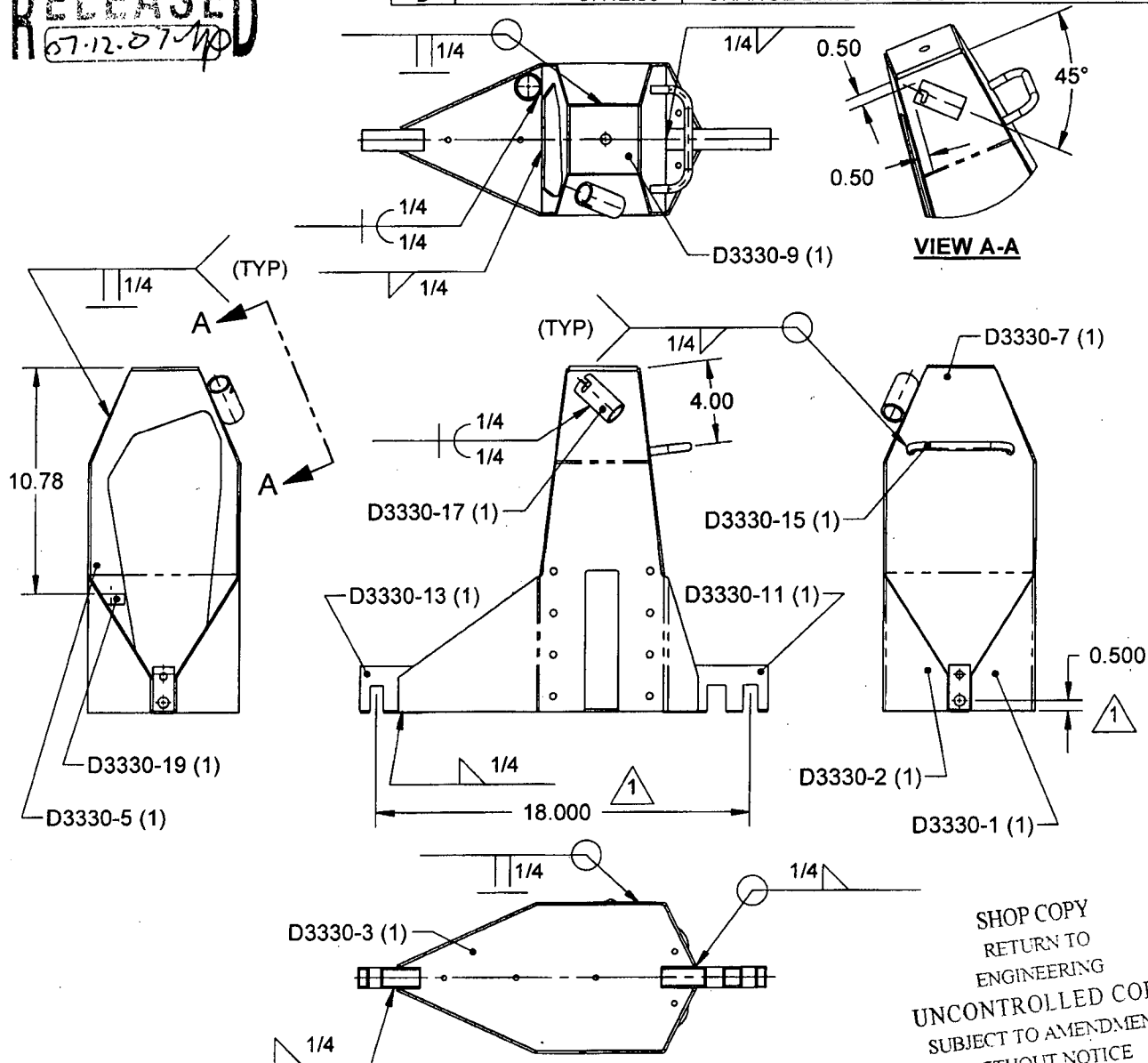
**NOTE:** Date & initial all entries





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DATE <b>07.12.06</b>		TITLE <b>FRAME WELDMENT</b>	SCALE 1:8
REV	DATE	DESCRIPTION	
A	04.12.16	NEW ISSUE	
B	05.02.26	RE-DESIGN	
C	07.03.20	ADD 0.100 DIM: RAISED BEND OF -1/2 BY 0.125	
D	07.12.06	CHANGE DIMS ON D3330-9	

RELEASED  
07.12.07



### D3330-041 FRAME WELDMENT

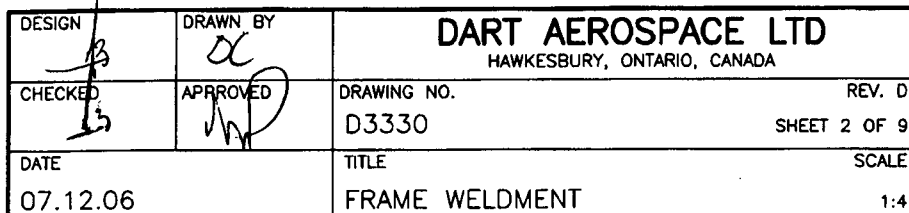
#### NOTES:

- 1) POSITION PARTS AS PER JIG D3330-041T1
- 2) WELD PER QSI 004
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

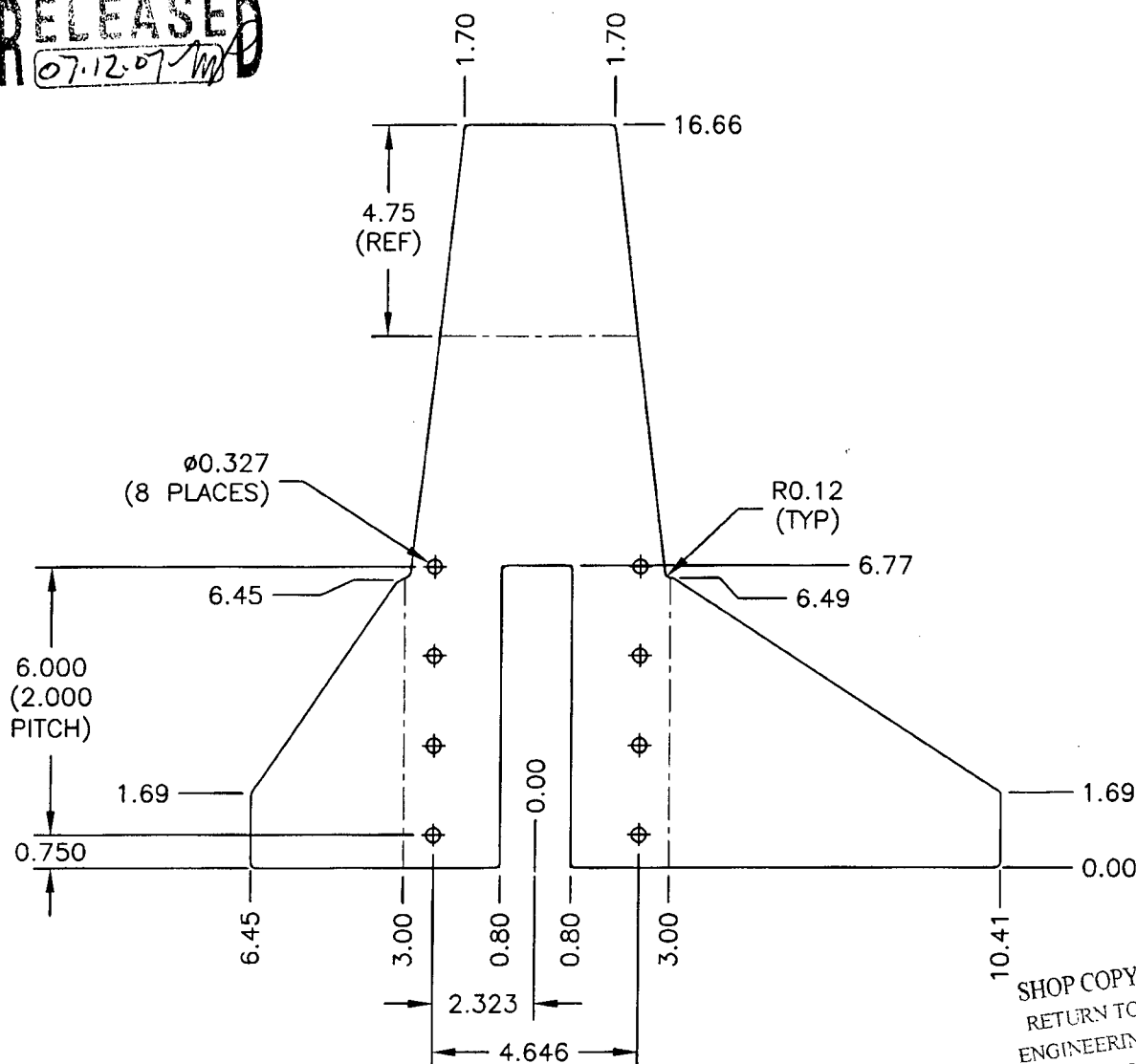
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D3330-1 PANEL

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,  
38W/44W/50W/60W/70W SERIES STEEL 11 GAUGE (0.125 THICK)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

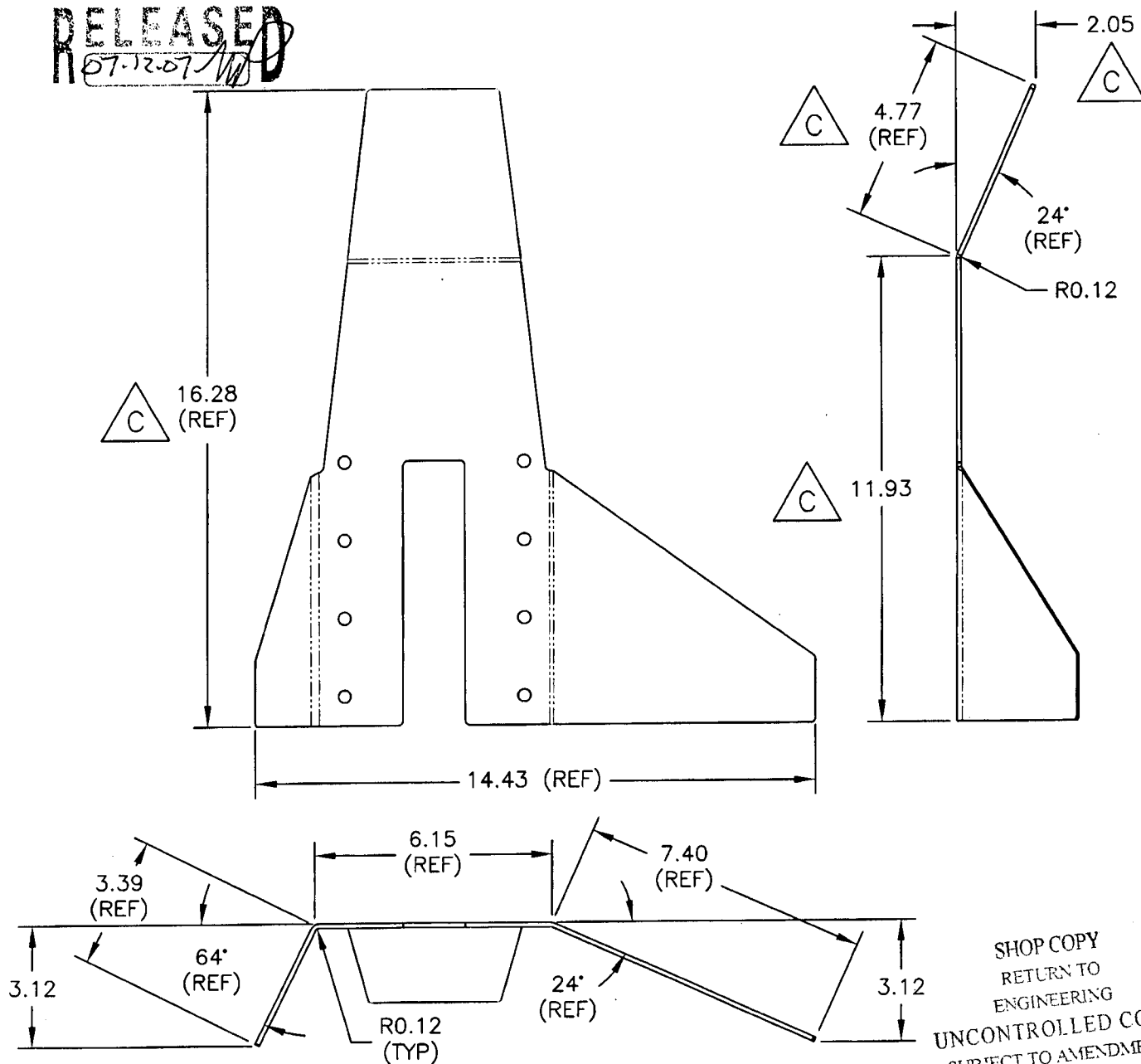
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DATE 07.12.06		TITLE FRAME WELDMENT	SCALE 1:4

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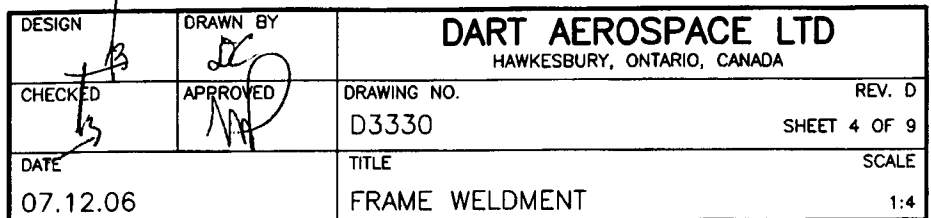


**D3330-1 BEND DETAIL (SHOWN)**  
BEND D3330-2 (OPPOSITE)

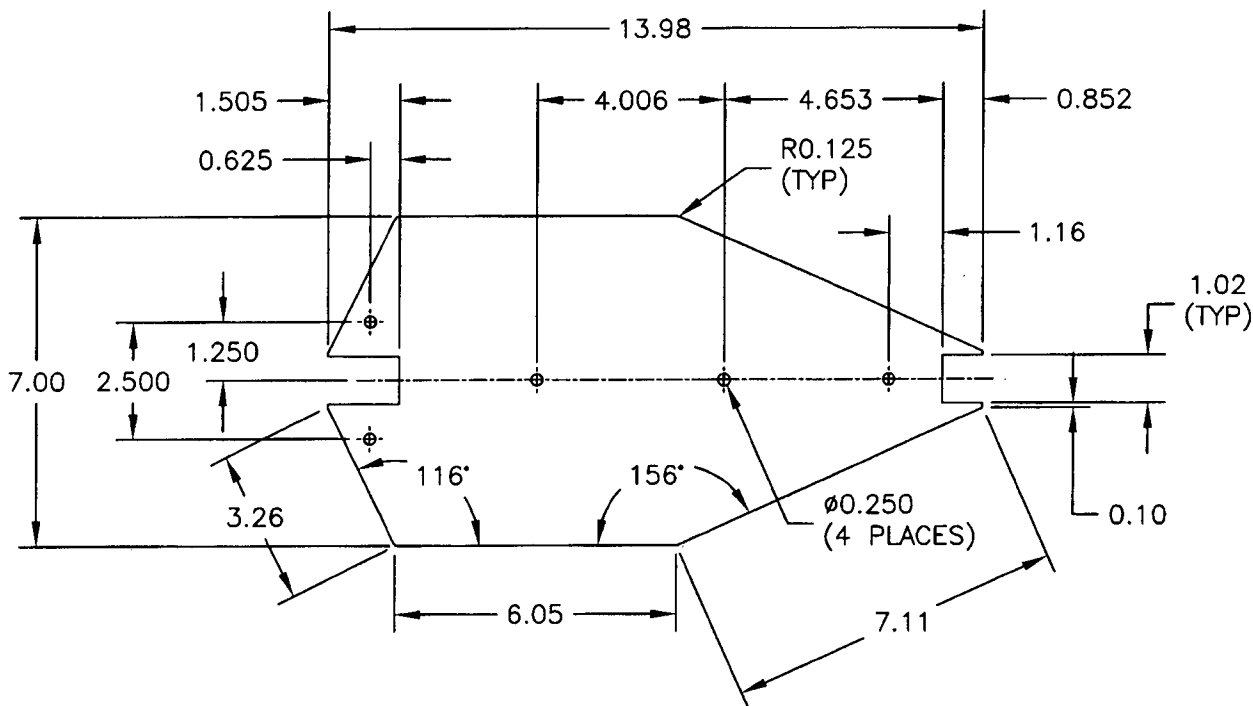
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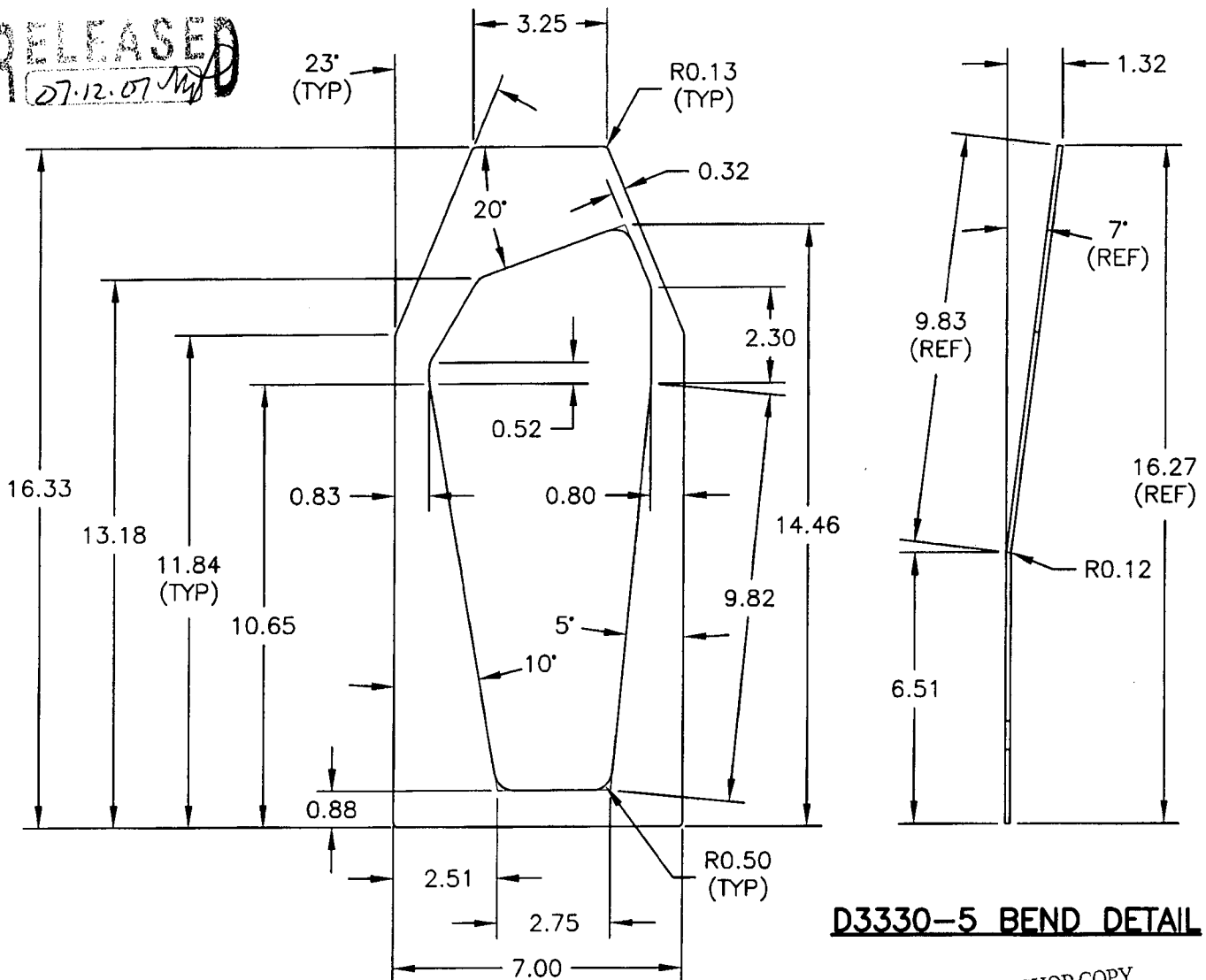
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- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,  
38W/44W/50W/60W/70W SERIES STEEL 11 GAUGE (0.125 THICK)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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DATE 07.12.06		TITLE FRAME WELDMENT	SCALE 1:4

RELEASED  
07.12.07 *MyA***FLAT PATTERN****D3330-5 BEND DETAIL**

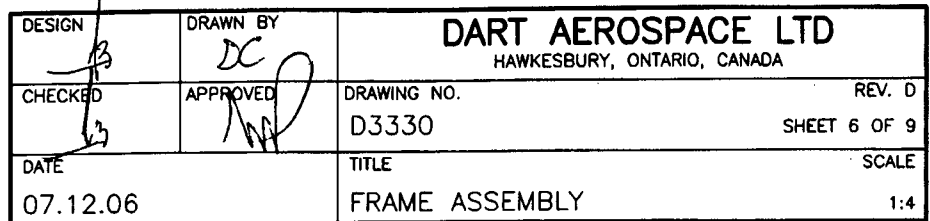
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**NOTES:**

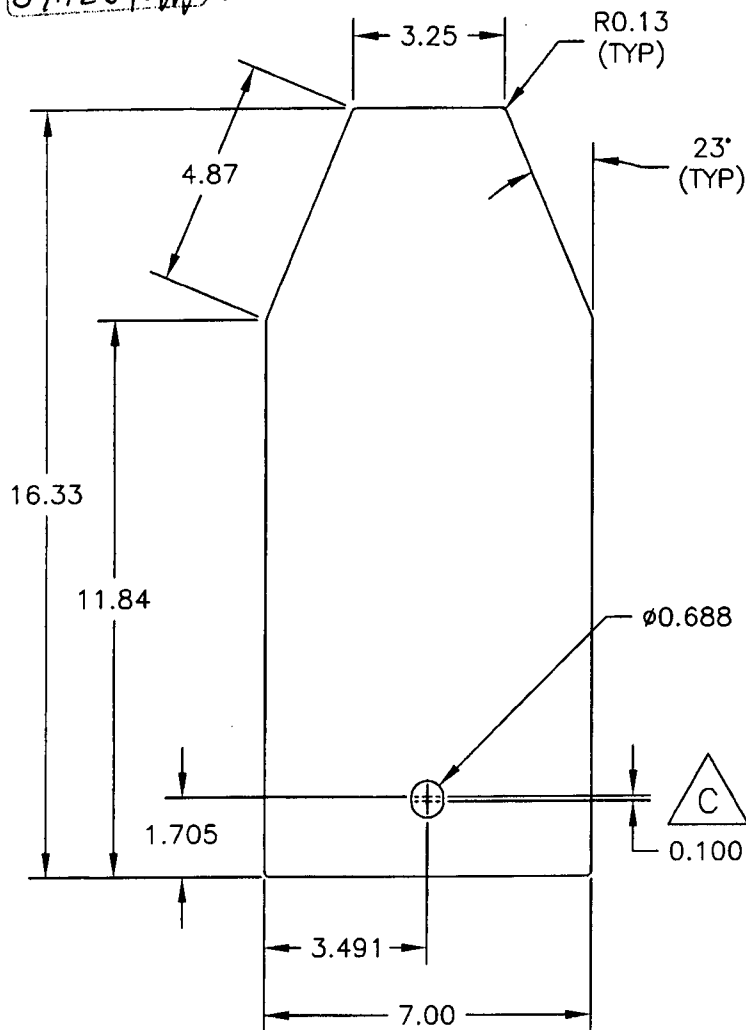
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 11 GAUGE (0.125 THICK)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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Technical drawing of a mechanical part showing dimensions and tolerances. The drawing includes the following specifications:

- Horizontal dimension: 1.32
- Vertical dimension: 6.51
- Vertical dimension: 16.27 (REF)
- Angle: 7° (REF)
- Radius: R0.12
- Dimension: 9.83 (REF)

D3330-7 BEND DETAIL

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1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40<sup>21</sup>,  
38W/44W/50W/60W/70W SERIES STEEL 11 GAUGE (0.125 THICK)

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

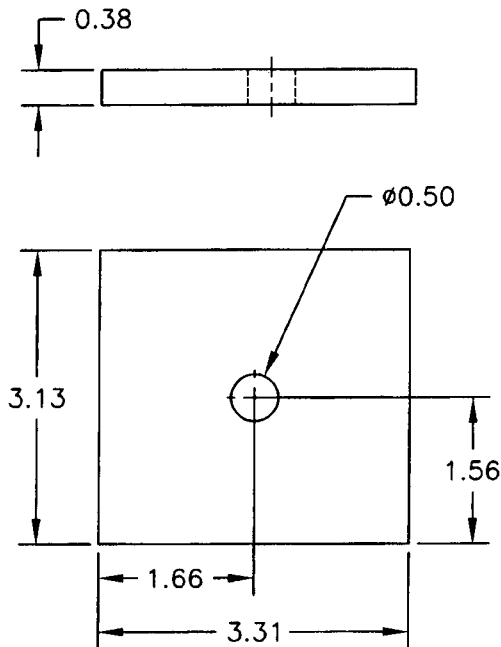
4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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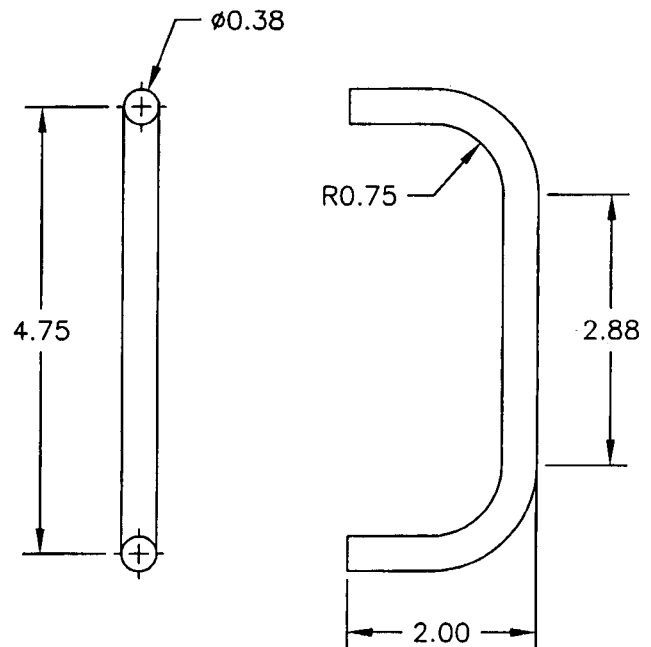


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DATE 07.12.06		TITLE FRAME WELDMENT	SCALE 1:2

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07.12.07 *[Signature]*



1 D3330-9 TOP PLATE



2 D3330-15 HANDLE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008, 0.375 STEEL (REF. DART SPEC. M1010-B0.375x3.500)
- 2) MATERIAL: AISI 1018-1025 ROUND BAR PER MIL-S-7097 (REF. DART SPEC. M1018-R0.375)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

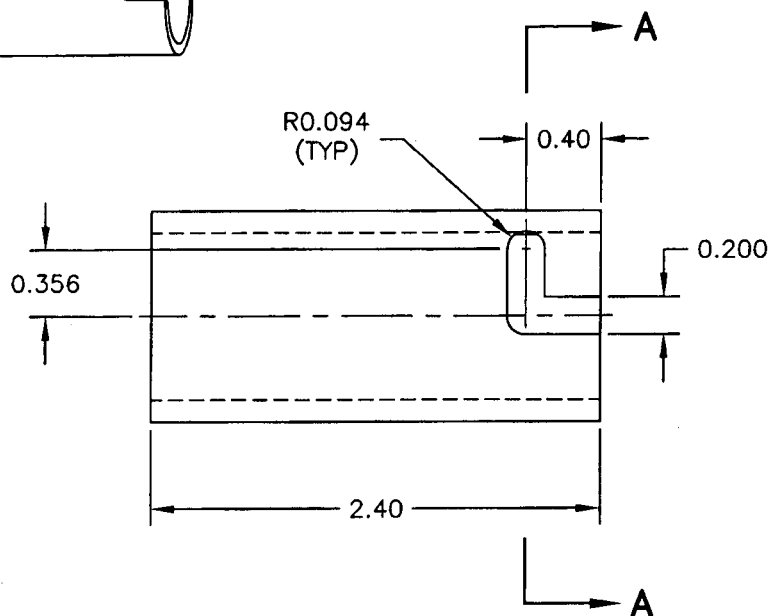
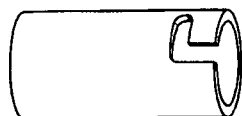
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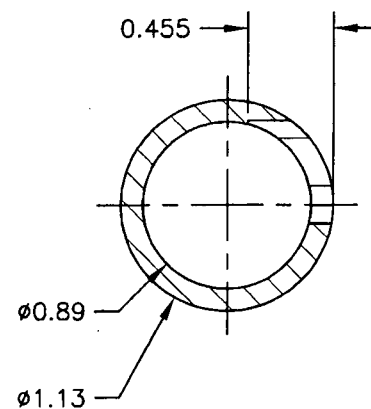
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DATE 07.12.06		TITLE FRAME WELDMENT	SCALE 1:1

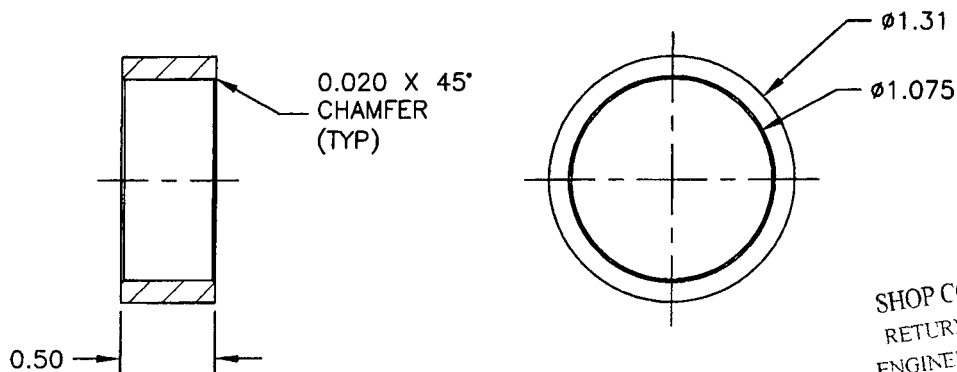


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SECTION A-A

D3330-17 HANDLE SOCKET



D3330-19 HANDLE RIM

NOTES:

- 1) MATERIAL: 1010-1025 ROUND BAR STEEL PER MILL-S-7097 (REF. DART SPEC. M1025TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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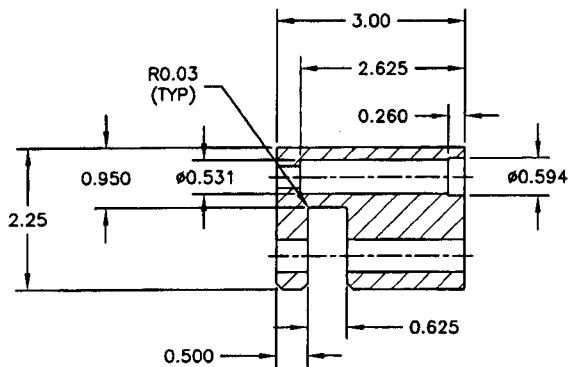
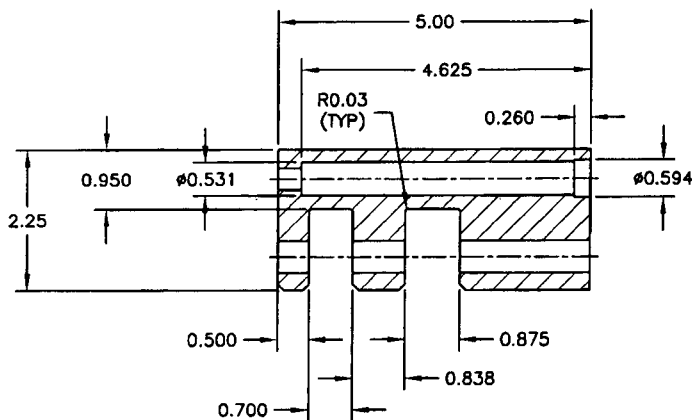
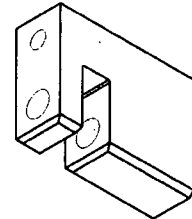
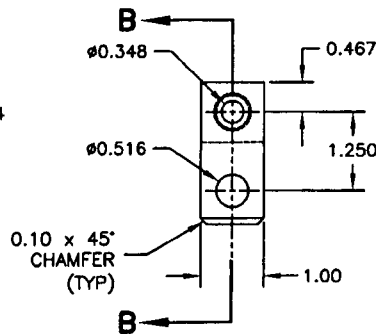
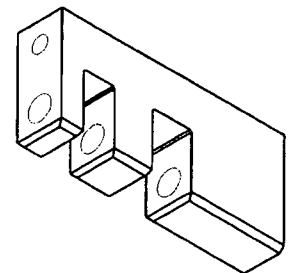
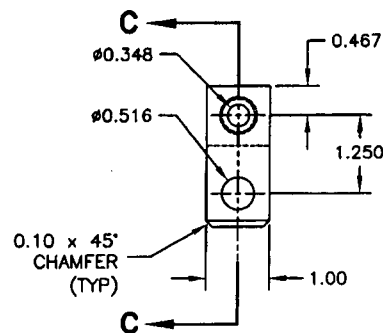
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DATE 07.12.06		TITLE FRAME WELDMENT	SCALE 1:3

**RELEASED**  
07.12.07**SECTION B-B****D3330-13 SHORT PIN BRACKET****SECTION C-C****D3330-11 LONG PIN BRACKET**

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WITHOUT NOTICE  
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NO. **37054**

**NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570, 1.000 THICK STEEL  
(REF. DART SPEC. M1010-B1.000x02.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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